UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE FOREST INSECT INVESTIGATIONS

Project

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TITLE

FOREST INSECT SURVEY - STANISLAUS NATIONAL FOREST SEASON OF 1944

by

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Forest Insect Laboratory 341 Giannini Hall, U. C. Berkeley 4, California December 15, 1944

6 capies typed; distribution as follows 1- FCC 1- R.O. 1- Supervisor, Stanislaus 1- 6.12.5. 1- Feles

FOREST INSECT SURVEY - STANISLAUS NATIONAL FOREST SEASON OF 1944

1. FIELD EXAMINATION.

Bureau of Entomology and Plant Quarantine.

J. E. Patterson, G. R. Struble - October 24-27

2. AREAS EXAMINED (See Map)

Parts of Mokelumne, Calaveras, Long Barn, Dardenelle, Clavey, Tuolumne, and Coulterville.

3. SURVEY METHODS.

Reconnaissance - Road strips and counts of faded trees from high vantage view points.

4. CURRENT INSECT TRENDS AND LOSSES.

Generally low endemic conditions prevail throughout the Forest. Infested trees broadly scattered, no grouping indicated. Measured losses and estimates of losses by areas are summarized in Tables 1 and 2.

5. INSECTS INVOLVED IN CURRENT KILL.

Western pine beetle, <u>Dendroctonus brevicomis</u> Lec. in ponderosa pine;

<u>D. monticolae</u> Hopk. in sugar pine;

<u>D. jeffreyi</u> Hopk. in Jeffrey pine;

<u>Ips</u> confusus Lec. killing tops and branches of ponderosa and sugar pine in isolated cases.

6. SPECIAL DEVELOPMENTS DURING SEASON.

Windthrown trees during February 1944 numerous in some areas. Those in the Pinecrest area were removed and salvaged, lessening the beetle hazard there; but in other areas, particularly the Mokelumne, Clavey and Calaveras, this condition is a potential menace to standing timber.

7. AREAS REQUIRING SPECIAL ATTENTION.

Mokelumne, Calaveras, Clavey. These areas should be watched more closely than the others because of blowdowns and logging activity to detect any localized insect outbreaks as a result of breeding in down material and logging slash. Some evidence of early seasonal (1944)

Ips topkilling in the Mokelumne area was noted. Down sugar pine logs are a particular menace because of mountain pine beetle activity.

8. RECOMMENDATIONS.

The endemic conditions found everywhere on the Forest at the time of the October survey indicated no need for immediate control work.

Approved by:

Submitted by:

F. P. Keen
Entomologist, in Charge

G. R. Struble Entomologist

Table 1. Measured Pine Losses Recorded in Roadside Strip Areas, 1942-1944

	Sample		Comparati		ve Losses Las 1943		1944	
Intomological Unit	Strip	Acres	Trees	BM/Ac	Trees	BM/Ac	Trees	BM/Ac
1 Hermit Springs	RD-1	236	5	13	5	13	1	11
2 Blue Mountain	RD-2	120	Ó	Ó	3	67	Cuto	ver
3 Dorington	RD-3	296	1	8	4	42	3	21
8 Niagara	RD-4	216	2	10	3	6	4	12
9 Pinecrest	RD-5	168	3	100	3	43	0	0
9 Pinecrest	RD-6	92	Ó	0	Ó	Ó	0	0
9 Pinecrest	RD-7	56	0	0	0	0	0	0
9 Pinecrest	RD-8	88	1	31	4	60	0	0
18 Buck Meadows	.RD-9	268	1	2	3	7	4	6

Table 2. Estimated Bark Beetle Losses during 1944 in Commercial Pine Stands.

Unit No.	Name of Unit	Acreage	Trees
Loss of 10	feet BM or less per Acre	e (Normal Inf	estation)
1	Hermit Springs	55,000	275
2	Blue Mountain	58,000	300
4	Griswold	64,000	300
5	Highland	83,000	250
6	Clarks Fork	20,000	35
5 6 7 9	Brightman	25,000	35 40
9	Pinecrest	10,000	30
10	Mt. Knight	83,000	100
11	Westside	32,000	100
12	Dodge	39,000	150
13	Jawbone	26,000	90
13 14	Cherry Valley	13,000	50
16	South Fork	16,000	60
8	Niagara	32,000	250
15	Mather	13,000	130
17	Bull Creek	25,000	290
18	Buck Meadows	51,000	450
Loss of 1	.1 to 20 feet BM per Acre	(Normal Inf	estation)
3	Dorington	37,000	250

